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Remarks

Claims 1-10 are pending.

Claims 1-10 are rejected.

I. 35 U.S.C. 103(a) Rejection of Claims 1-10

The Examiner rejected Claims 1-10 under 35 U.S.C. 103(a) as being anticipated over Rhee (U.S. Patent 6,289,054) in view of Clark (U.S. Patent 7,058,048). Applicants disagree with this ground of rejection.

A. Rejection of Claim 1

Claim 1 claims the elements of "adapting, responsive to said step of receiving network communication parameters, said encoding step using a neural network, wherein said adapting step is at least one of: bit rate shaping said transmission of said signal, and modifying a quantization level used for said encoding of said signal."

The Examiner combines both Rhee and Clark to find these elements as to anticipate Claim 1. Applicants disagree with the Examiner's conclusions for the following reasons.

Rhee is a directed towards a system which uses both Forward Error Correction techniques and repair packets to fix the transmission of a stream of packets. Additionally, the system uses a parameter known as periodic temporal dependency distance (PTDD) which is the number of frame intervals between two periodic frames (see Rhee, col. 2, lines 14-24). Hence, when combined with Clark, the disclosed system is a system that is focused upon adjusting transmitted repair packets, performing a FEC operation, and/or a dynamically adjusting the PTDD parameter associated with a stream.

The combined references however do not perform the step of an adapting step for an encoder where the encoding is affected by adjusting at least one of "bit rate shaping said transmission of the signal, and modifying a quantization level used for said encoding of said signal" as claimed in Claim 1.

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That is, the proposed combination of references cited to by the Examiner,
solves the problem of how to account for congestion over a packet based network,
than the present invention. As recited earlier, the Examiner's combination solves
the problem of network congestion differently than the claimed invention by
performing operations such as adjusting transmitted repair packets, performing a
FEC operation, and/or a dynamically adjusting the PTDD parameter associated
with a stream.

The Examiner's recitation to Rhee (in combination with Clark) of "modifying
a quanization level (base & enhancement layer) and rate shaping for 406 (see col.
5, lines 36 +; also see col. 15, lines 30-39)", do not show these features as
claimed in Claim 1.. That is, Rhee (with Clark) refers to a decompression
operation which, "can be performed according to H.261, H.263, MPEG-1, MPEG-
2, MPEG-4, or other suitable algorithm," (Rhee, col. 5, lines 35-36).

Additionally, the Examiner's recitation in Rhee, col. 5, lines 35-36 is only
part of the disclosure in Rhee (with Clark) and must be considered in view of the
complete combination, where the combination is to be enabling. That is, the
disclosure in an assertedly anticipating reference must provide an enabling
disclosure of the desired subject matter; mere naming or description of the subject
matter is insufficient, if it cannot be produced without undue experimentation. *Elan
Pharm., Inc. v. **>Mayo Found. For Med. Educ. & Research<*, 346 F.3d 1051,
1054, 68 USPQ2d 1373, 1376 (Fed. Cir. 2003).

Specifically, Rhee directly acknowledges this point:

"The integration of rate control schemes for RESCU has not been investigated as
it is outside the primary scope of the embodiments described herein. RESCU can
be extended to incorporate rate control schemes (e.g. frame rate reduction,
quantization step-size adjustment etc.) that can reduce bit rate in terms of packet
losses so that congestion is not aggravated by increased overhead of protecting
video frames," (Rhee, col. 15, lines 31-38, emphasis added).

The present invention of Claim 1, and the related disclosure, does disclose
specifics as to what to adjust in an encoding phase and does its solution
differently than what is disclosed in the Examiner's combination.

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Therefore, Applicants assert Claim 1 is patentable over the Examiner's combination.

B. Rejection of Claim 2

Claim 2 claims that the network communication parameters to be considered are: packet fraction loss, cumulative number of packets lost, inter-arrival jitter, and last sender report. The Examiner has not shown in the combination of references where all four of these network communication parameters are selected for a neural network to operate.

Although the cited references do disclosure various communication parameters (not specifically using the last sender report in Claim 2) There is no disclosure in Clark (with Rhee) what specific communication parameters should be selected for a neural network (see Clark, col. 9, lines 64-67). That is, in view of the two references even if they disclosed all of the selected communication parameters, the Examiner has not established why these parameters in Claim 2 would be used for the operation of a neural network.

C. Rejection of Claim 6

The Examiner has not established a prima facie rejection under 35 U.S.C. 103(a) by establishing where in Rhee and Clark (alone or separately), the claimed element of "adjusting an amount of base later data transmitted with amount of data corresponding to an enhancement layer" of Claim 6 is found in the cited references.

The Examiner's recitation to base/enhancement layer adjustment in the encoder (for Claim 6) is cited to in Rhee (with Clark) in reference to the different decoding standards used for a decoder (see Rhee, col. 5, line 36). There is not a teaching in the Examiner's combination that the base layer and associated enhancement layers would be adjusted during a transmission at the encoder.

Additional rationale why Claim 6 is patentable is disclosed above for Claim 1.

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D. Rejection of Claim 7

Claim 7 is patentable for the same reasons recited above for Claim 2.

For the reasons recited above in connection for Claims 1, 2, 6, and 7, Applicants request that the Examiner remove the rejection to these claims. Applicants also request that the Examiner remove the rejection to Claims 3-5 and Claims 8-10, as such claims depend on allowable Claims 1 and 6, respectively.. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the Applicant's attorney at (609) 734-6809, so that a mutually convenient date and time for a telephonic interview may be scheduled.

Applicants request a two month extension to submit this response under 37 C.F.R. 1.136(a). Please charge the fee for this extension, and any other fees owed in connection with this response to Deposit Account 07-0832.

Respectfully submitted,

/Joel M. Fogelson/
By: Joel M. Fogelson
Reg. No. 43, 613
Phone (609) 734-6809

Patent Operations
Thomson Licensing Inc.
Two Independence Way
P.O. Box 5312
Princeton, New Jersey 08543-5312
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